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AMENDMENTS TO THE CLAIMS

1-15. (canceled)

16. (currently amended) A compound of the formula (I),

where

is a metal of transition group IV, V or VI of the Periodic Table of the Elements

<u>Ti, Zr or Hf</u>,

- are identical or different and are each a radical Si(R¹²)₃, where R¹² are identical or different and are each a hydrogen atom or a C₁-C₄₀-group, or R¹ is a C₁-C₃₀-group, or two or more radicals R¹ may be connected to one another in such a way that the radicals R¹ and the atoms of the cyclopentadienyl ring which connect them form a C₄-C₂₄-ring system which may in turn be substituted,
- R² are identical or different and are each a radical Si(R¹²)₃, where R¹² are identical or different and are each a hydrogen atom or a C₁-C₄₀-group, or R² is a C₁-C₃₀-group, or two or more radicals R² may be connected to one another in such a way that the radicals R² and the atoms of the cyclopentadienyl ring which connected them form a C₄-C₂₄-ring system which may in turn be substituted,

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R³ are identical or different and are each a C₆ C₂₄ aryl, C₅ C₂₄ heteroaryl, is C₇-C₃₀-alkylaryl, fluorinated C₆-C₂₄-aryl, or fluorinated C₇-C₃₀-alkylaryl,

X is a halogen atom,

n is from 0 to 4,

n' is from 0 to 4,

k is 1,

is a bridging structural element between the two cyclopentadienyl rings defined as

M³R¹³R¹⁴, wherein M³ is carbon or silicon and R¹³ and R¹⁴ are identical or

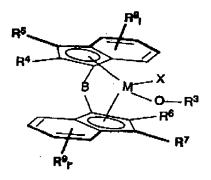
different and are C₁-C₁₀-alkyl, C₆-C₁₄-aryl or trimethyl silyl,

and

one or both cyclopentadienyl rings are substituted in such a way that they form an indenyl ring.

17-21. (canceled)

22. (currently amended) The compound of claim 21 claim 16 having the formula



where

 R^4 - R^7 are identical or different and are each a hydrogen atom or a C_1 - C_{20} -group,

- R⁸, R⁹ are identical or different and are each a hydrogen atom, a halogen atom or a C₁-C₂₀-group, and two radicals R⁸ or R⁹ may form a monocylic or polycyclic ring system which may in turn be substituted,
- R^3 , M_s and X and B are as previously defined, and
- I, I' are identical or different and are each an integer from zero to 4.
- 23-26. (canceled)
- 27. (currently amended) The compound of claim 24 claim 22 wherein the indenyl rings are identical.
- 28. (previously presented) The compound of claim 27 wherein M is Zr, the indenyl rings are 2-methyl-4,5-benzoindenyl or 2-methyl-indenyl and X is chlorine.
- 29. (previously presented) The compound of claim 28 wherein the indenyl rings are 2-methyl-4,5-benzoindenyl.
- 30. (previously presented) The compound of claim 28 wherein the indenyl rings are 2-methyl-indenyl.
- 31. (currently amended) The compound of claim 29 wherein R³ is 2,4-tert butyl-phenyl 2,4-di-tert-butyl-phenyl, 2,4-di-tert-pentyl-phenyl or 2-isopropyl-5-methyl-phenyl.
- 32. (currently amended) The compound of claim 30 wherein and R³ is 2,4-di-tert-butyl-phenyl or 2-isopropyl-5-methyl-phenyl.
- 33. (currently amended) The compound of claim 27 wherein B is SiR¹³R¹⁴ wherein R¹³ and R¹⁴ are identical or different and are each hydrogen or C₁ C₂₀ hydrocarbon containing group Me or Ph.
- 34. (previously presented) The compound of claim 31 wherein B is dimethylsilanediyl.

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- 35. (previously presented) The compound of claim 32 wherein B is dimethylsilanediyl.
- 36. (previously presented) The compound of claim 22 wherein X is chlorine.
- (currently amended) A catalyst comprising at least one compound as claimed in claim 16.
 and a support and , optionally, a cocatalyst.
- 38. (currently amended) A process for preparing a polyolefin which comprises polymerizing an olefinic monomer in the presence of a catalyst as claimed in claim 33 claim 37.
- 39. (new) The compound of claim 16, wherein the moiety MX(OR³) is zirconium monochloride mono(2,4-di-tert-butylphenoxide), zirconium monochloride mono(2,6-di-tert-butylphenoxide), zirconium monochloride mono(3,5-di-tert-butylphenoxide), zirconium monochloride mono(2,6-di-sec-butylphenoxide), zirconium monochloride mono(2,4-di-methylphenoxide), zirconium monochloride mono(2,3-di-methylphenoxide), zirconium monochloride mono(2,5-di-methylphenoxide), zirconium monochloride mono(2,6-di-methylphenoxide), zirconium monochloride mono(3,4-di-methylphenoxide), zirconium monochloride mono(3,5-di-methylphenoxide), zirconium monochloride mono(2-methylphenoxide), zirconium monochloride mono(3-methylphenoxide), zirconium monochloride mono(4-methylphenoxide), zirconium monochloride mono(2-ethylphenoxide), zirconium monochloride mono(3-ethylphenoxide), zirconium monochloride mono(4-ethylphenoxide),

zirconium monochloride mono(2-sec-butylphenoxide), zirconium monochloride mono(2-tert-butylphenoxide), zirconium monochloride mono(3-tert-butylphenoxide), zirconium monochloride mono(4-sec-butylphenoxide), zirconium monochloride mono(4-tert-butylphenoxide), zirconium monochloride mono(2-isopropyl-5-methylphenoxide), zirconium monochloride mono(4-isopropyl-3-methylphenoxide), zirconium monochloride mono(5-isopropyl-2-methylphenoxide), zirconium monochloride mono(5-isopropyl-3-methylphenoxide), zirconium monochloride mono(2,4-bis (2-methyl-2-butyl)phenoxide), zirconium monochloride mono(2,6-di-tert-butyl-4-methylphenoxide), zirconium monochloride mono(4-nonylphenoxide), zirconium monochloride mono(isopropylphenoxide), zirconium monochloride mono(propylphenoxide), zirconium monochloride mono(trimethylphenoxide), zirconium monochloride mono(tert-butyl-methylphenoxide), zirconium monochloride mono(2-tert-butyl-4-ethylphenoxide), zirconium monochloride mono(2,6-diisopropylphenoxide), zirconium monochloride mono(4-octylphenoxide) or zirconium monochloride mono(2,6-di-tert-butyl-4-ethylphenoxide). (new) The compound of claim 22, wherein the moiety MX(OR3) is zirconium monochloride mono(2,4-di-tert-butylphenoxide), zirconium monochloride mono(2,6-di-tert-butylphenoxide),

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zirconium monochloride mono(3,5-di-tert-butylphenoxide), zirconium monochloride mono(2,6-di-sec-butylphenoxide), zirconium monochloride mono(2,4-di-methylphenoxide), zirconium monochloride mono(2,3-di-methylphenoxide), zirconium monochloride mono(2,5-di-methylphenoxide), zirconium monochloride mono(2,6-di-methylphenoxide), zirconium monochloride mono(3,4-di-methylphenoxide), zirconium monochloride mono(3,5-di-methylphenoxide), zirconium monochloride mono(2-methylphenoxide), zirconium monochloride mono(3-methylphenoxide), zirconium monochloride mono(4-methylphenoxide), zirconium monochloride mono(2-ethylphenoxide), zirconium monochloride mono(3-ethylphenoxide), zirconium monochloride mono(4-ethylphenoxide), zirconium monochloride mono(2-sec-butylphenoxide), zirconium monochloride mono(2-text-butylphenoxide), zirconium monochloride mono(3-tert-butylphenoxide), zirconium monochloride mono(4-sec-butylphenoxide), zirconium monochloride mono(4-tert-butylphenoxide), zirconium monochloride mono(2-isopropyl-5-methylphenoxide), zirconium monochloride mono(4-isopropyl-3-methylphenoxide), zirconium monochloride mono(5-isopropyl-2-methylphenoxide), zirconium monochloride mono(5-isopropyl-3-methylphenoxide),

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zirconium monochloride mono(2,4-bis (2-methyl-2-butyl)phenoxide),
zirconium monochloride mono(2,6-di-tert-butyl-4-methylphenoxide),
zirconium monochloride mono(4-nonylphenoxide),
zirconium monochloride mono(isopropylphenoxide),
zirconium monochloride mono(propylphenoxide),
zirconium monochloride mono(trimethylphenoxide),
zirconium monochloride mono(tert-butyl-methylphenoxide),
zirconium monochloride mono(2-tert-butyl-4-ethylphenoxide),
zirconium monochloride mono(2,6-diisopropylphenoxide),
zirconium monochloride mono(4-octylphenoxide) or
zirconium monochloride mono(2,6-di-tert-butyl-4-ethylphenoxide).

- 41. (new) The compound of claim 16 wherein the solubility of said compound of formula (I) measured as molar concentration in toluene at room temperature is at least doubled compared with the solubility of the corresponding metallocene dichloride wherein X is Cl and OR³ is Cl.
- 42. (new) The compound of claim 22 wherein the solubility of said compound of formula (I) measured as molar concentration in toluene at room temperature is at least doubled compared with the solubility of the corresponding metallocene dichloride wherein X is Cl and OR³ is Cl.

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